

WO 01/26323

PCT/AU00/01170

13

CLAIMS

1. In a telecommunication system having a first network based on a first technology and a second network based on a second technology, the second network in communication with the first network;

a message encoding format profile functionality adapted to enable transport of encoded information along at least a portion of a path of communication established between the networks, the profile functionality including:

mapping means for mapping the encoded information from a first message having a first message encoding format to a second message having a second message encoding format wherein the mapping is performed in accordance with the following steps:

- a) determining message User-to-User Indication information;
- b) determining message Length Indicator information, and;
- c) selecting a message encoding format based on the determination of a) and b), above, and;

message creation means for creating the second message having a message encoding format in accordance with the encoding format selected in c).

2. A message encoding format profile functionality as claimed in claim 1, wherein the mapping is based on logical mapping.

3. A message encoding format profile functionality as claimed in claim 2, wherein the logical mapping includes bit stuffing.

4. A message encoding format profile functionality as claimed in claim 1, 2 or 3, wherein the second network is an ATM core network.

5. A message encoding format profile functionality as claimed in claim 4, wherein the ATM network includes an AAL2 Adaptation layer.

6. A message encoding format profile functionality as claimed in claim 5, wherein the AAL2 adaptation layer includes an I.366.2 Service Specific Convergence Sublayer.
7. A message encoding format profile functionality as claimed in any one of the previous claims, wherein the first network is an access network.
8. A message encoding format profile functionality as claimed in claim 7, wherein the first network is a radio access network.
9. A message encoding format profile functionality as claimed in claim 8, wherein the radio access network is a UMTS access network.
10. A message encoding format profile functionality as claimed in claim 7, wherein the first network is a PLMN.
11. A message encoding format profile functionality as claimed in any one of claims 4 to 10, wherein the message encoding format profile functionality is located in a node of the core network.
12. A message encoding format profile functionality as claimed in claim 11, wherein the node is a UMSC of the core network.
13. A message encoding format profile functionality as claimed in any one of the previous claims, wherein the encoded information is AMR codec encoded information.
14. A telecommunication system including the message encoding format profile functionality as claimed in any one of the previous claims.
15. A telecommunication system as claimed in claim 14, further including a third network based on the first technology, in communication with the second

network, and wherein the message encoding format profile functionality is adapted to enable transport of encoded information along at least a portion of a path of communication established between the first and third networks.

16. In a telecommunication system having a first network based on a first technology and a second network based on a second technology, the second network in communication with the first network, a method of providing a message encoding format profile functionality adapted to enable transport of encoded information along at least a portion of a path of communication established between the networks, the method including:

mapping the encoded information from a first message having a first message encoding format to a second message having a second message encoding format wherein the mapping is performed in accordance with the following steps:

- a) determining message User-to-User Indication information;
- b) determining message Length Indicator information, and;
- c) selecting a message encoding format based on the determination of steps a) and b), above.

17. A method as claimed in claim 16, wherein the step of mapping is based on logical mapping.

18. A method as claimed in claim 17, wherein the step of mapping includes bit stuffing.

19. A method of creating a message for use in a telecommunication system as claimed in claim 14 or 15, the method including the steps of:

providing a message encoding format profile functionality in accordance with the method of any one of claims 16 to 18, and;

creating the second message having a message encoding format as defined by the encoding format selected in step c).

20. In a telecommunication system having a first network based on a first technology and a second network based on a second technology, the second network in communication with the first network;

a message encoding format profile functionality adapted to enable transport of encoded information along at least a portion of a path of communication established between the networks, the profile functionality including:

mapping means for mapping the encoded information from a first message having a first message encoding format to a second message having a second message encoding format wherein the mapping is performed in accordance with table 2 as herein disclosed.

21. A message encoding format profile functionality as claimed in claim 20, wherein the mapping is based on logical mapping.

22. A message encoding format profile functionality as claimed in claim 20, wherein the logical mapping includes bit stuffing.

23. In a telecommunication system having a first network based on a first technology and a second network based on a second technology, the second network in communication with the first network, a method of providing a message encoding format profile functionality adapted to enable transport of encoded information along at least a portion of a path of communication established between the networks, the method including:

mapping the encoded information from a first message having a first message encoding format to a second message having a second message encoding format wherein the mapping is performed in accordance with table 2 as herein disclosed.

24. A method as claimed in claim 23, wherein the step of mapping is based on logical mapping.

WO 01/26323

PCT/AU00/01170

17

25. A method as claimed in claim 24, wherein the step of mapping includes bit stuffing

26. A method of transporting encoded speech information to and from a first endpoint in an access network across an ATM core network, said access network being connected to said core network via first telecommunications node, said method including:

(a) generating an AMR encoded packet at said first endpoint from a digitised speech signal;

(b) transmitting said AMR encoded packet to said first telecommunications node,

(c) mapping the contents of said AMR encoded packet at said first telecommunications node into an ATM Convergence Sublayer Protocol Data Unit; and

(d) transmitting said ATM Convergence Sublayer Protocol Data Unit across said core network to said second telecommunications node;

(e) reconstructing said AMR encoded packet from said ATM Convergence Sublayer Protocol Data Unit at a second telecommunications node within or at an interface to said ATM core network.

27. A telecommunications system including:

one or more access networks connected to an ATM core network,

a first endpoint in communication with said core network via said a first of said access networks, and

first and second telecommunications nodes both of which are within or at interfaces to said ATM core network, wherein

said first endpoint acts to generate an AMR encoded packet at said first endpoint from a digitised speech signal and transmits said AMR encoded packet to said first telecommunications node, and wherein

said first telecommunications node acts to map the contents of said AMR encoded packet into an ATM Convergence Sublayer Protocol Data Unit and transmits said ATM Convergence Sublayer Protocol Data Unit across said core

network to said second telecommunications node for reconstruction of said AMR encoded packet.

28. A first telecommunications node for use in a telecommunications system including one or more access networks connected to an ATM core network, a first endpoint in communication with said core network via a first of said access networks, and a second telecommunications node, said first and second telecommunications nodes both being within or at interfaces to said ATM core network, wherein said first endpoint acts to generate an AMR encoded packet from a digitised speech signal and transmits said AMR encoded packet to said first telecommunications node, wherein said first telecommunications node includes:

processing means to map the contents of said AMR encoded packet into an ATM Convergence Sublayer Protocol Data Unit, and

transmission means to transmit said ATM Convergence Sublayer Protocol Data Unit across said core network to said second telecommunications node for reconstruction of said AMR encoded packet from said ATM Convergence Sublayer Protocol Data Unit.

29. A system, protocol or device as herein disclosed.

30. A method as herein disclosed.